

MATERIAL SAFETY DATA SHEET  
CS85\*CLEANING SOLUTION/TF SOLUTION/  
KEYBOARD CLEANER/CLEANING SOLUTION/  
READERKLEEN

July 1993

## SECTION I

## GENERAL INFORMATION

Distributor's name and address:

PerfectData Corporation  
110 West Easy Street  
Simi Valley, California 93065-1689

PRODUCT NAME CS85\* CLEANING SOLUTION/TF SOLUTION/  
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EMERGENCY CONTACT: CHEMTREC (800) 424-9300

CHEMICAL NAME: ISOPROPYL ALCOHOL (Isopropanol)

## HAZARD RATING:

HEALTH: 2  
FIRE: 3  
REACTIVITY: 0  
SPECIAL: None

## SECTION II

## HAZARDOUS INGREDIENTS

COMPONENT	CAS NO.	% PEL	OSHA TLV	ACGIH LIMIT	OTHER	HAZARD
ISOPROPYL	67-63-0	>99	400	400	500	FLAMMABLE (ACGIH STEL)

## SECTION III

## PHYSICAL PROPERTIES

BOILING POINT (Deg F): 181 MELTING POINT (Deg F): -127

SPECIFIC GRAVITY (Water=1): 0.79 APPEARANCE: Clear colorless liquid

ODOR: Medicinal alcoholic WATER SOLUBILITY %: 100

EVAPORATION RATE (Butyl Acetate=1): 3 VAPOR DENSITY (Air =1): 2.07

VAPOR PRESSURE, MM H G/20 Deg C: 33

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**SECTION IV****FIRE AND EXPLOSION INFORMATION**

FLASH POINT (Deg F): 53

METHOD USED: TCC

FLAMMABLE LIMITS IN AIR %: LOWER: 2 UPPER: 12.7

EXTINGUISHING MEDIA: Use water spray, dry chemical, CO<sub>2</sub>, or alcoholic foam. Do not use a direct water stream.

SPECIAL FIRE FIGHTING  
PROCEDURES:

Fire fighters should wear self contained breathing apparatus (SCBA) and full protective clothing. Use water spray to cool nearby containers and structures exposed to fire.

UNUSUAL FIRE AND  
EXPLOSION HAZARDS:

Extinguish all near sources of ignition because vapors may be moved by air currents to ignition sources distant from the handling point.

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**SECTION V****HAZARDOUS REACTIVITY**

STABILITY: Stable

POLYMERIZATION: Will not occur

CONDITIONS TO AVOID:

Strong oxidizers, aluminum, acetaldehyde, chlorine, ethylene oxide, hydrogen-palladium combination, H<sub>2</sub>O<sub>2</sub>-H<sub>2</sub>SO<sub>4</sub> combination, hypochlorous acid, isocyanates, nitroform, phosgene, oleum, perchloric acid, potassium 5-butoxide, acids, alkalis, amines, halogens, halogen compounds, anhydrides, and aldehydes.

HAZARDOUS DECOMPOSITION

PRODUCTS:

May liberate carbon monoxide or carbon dioxide.

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**SECTION VI****HEALTH HAZARD INFORMATION**

PRIMARY ROUTES  
OF EXPOSURE:

Skin or eye contact, inhalation, swallowed

SIGNS AND SYMPTOMS  
OF EXPOSURE:

**INHALATION:** Vapors and mists irritate the nose and throat. Inhalation of higher concentrations may cause headaches, vomiting, and coma. Inhalation of very high concentrations or prolonged exposure may cause unconsciousness or death.

**EYE CONTACT:** Vapors will irritate the eyes. Liquid and mists can severely irritate or damage the eyes and cause corneal burns.

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**SECTION V1 (Cont'd)**

**SKIN CONTACT:** Brief contact may dry the skin, or cause burning or stinging sensation. Prolonged or repeated contact may irritate the skin, causing dermatitis.

**SWALLOWED:** Swallowing large quantities causes headaches, nausea vomiting stomach cramps and diarrhea, and perhaps unconsciousness, or death.

**CHRONIC EFFECTS  
OF EXPOSURE:**

Prolonged or repeated exposure to high concentrations can produce severe or fatal CNS depression.

**MEDICAL CONDITIONS  
GENERALLY AGGRAVATED  
BY EXPOSURE:**

Persons with pre-existing skin disorders, eye problems, or impaired respiratory function may be more susceptible to the effects for this substance.

**SECTION VII**

**PERSONAL PROTECTION**

**VENTILATION:**

Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the PEL.

**RESPIRATORY  
PROTECTION:**

If use conditions generate vapors or mists, wear a NIOSH approved respirator appropriate for those emissions levels. Appropriate respirators may be a full face piece or a half mask air purifying cartridge respirator equipped for organic vapors/mists, a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.

**EYE PROTECTION:**

Chemical goggles unless a full face piece respirator is also worn. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of an eye injury.

**PROTECTIVE CLOTHING:**

Long-sleeved shirt, trousers, safety shoes, rubber gloves and rubber apron.

**OTHER PROTECTIVE  
MEASURES:**

An eyewash and safety shower should be nearby and ready for use.

**SECTION VIII**

**FIRST AID MEASURES**

**IF INHALED:**

Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention.

**EYE CONTACT:**

Immediately flush eyes with lots of running water for 15 minutes. Lifting the upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN CONTACT:**

Immediately wash skin with lots of soap and water. Remove contaminated clothing and shoes, wash before reuse. Get medical attention if irritation persists after washing.

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**SECTION IX SPILL, LEAK AND DISPOSAL PROCEDURES**

**ACTION TO TAKE - FOR SPILLS AND LEAKS:**

**SPILLS:** Wear protective equipment including rubber boots, rubber gloves, rubber apron and a self-contained breathing apparatus in the pressure demand mode or a supplied air respirator. If the spill or leak is small, a full face piece air purifying in any event, always wear eye protection. Extinguish all ignition sources and ensure that all handling equipment is electrically grounded. For small spill or drips, mop or wipe up and dispose of in DOT approved waste container. For large spills, contain by diking with soil or other non-combustible absorbent materials and then pump into DOT approved waste container, or absorb with non combustible sorbent material, place residue in DOT approved waste containers. Keep out of sewers, storm drains, surface waters, and soil. Comply with all applicable governmental regulations on spill reporting and handling and disposal of waste.

**DISPOSAL METHODS:** Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate Federal, State and Local regulatory agencies to ascertain proper disposal procedures.

**NOTE:** Empty containers can have residues, gases and mists and are subject to proper waste disposal, as above.

**SECTION X SPECIAL PRECAUTIONS**

**HANDLING AND STORAGE**

**PRECAUTIONS:** Keep away from heat, sparks and flames. Store in a cool, dry, well-ventilated place away from incompatible materials. Vent container frequently and more often in warm weather, to relieve pressure. Electrically ground all equipment when handling this product and use only non-sparking tools. Keep container tightly closed when not in use. Do not use pressure to empty container. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing.

**SECTION XI TOXICITY DATA**

**ORAL:** Rat LD50 = 5840 Mg/Kg

**DERMAL:** Rabbit LD50 = 13 Gm/Kg

**INHALATION:** Rat LC50 = 16,000 ppm/8 hr

**CARCINOGENICITY:** This material is not considered to be a carcinogen by the national toxicology program, the international agency for research on cancer, or the occupational safety and health administration.

**OTHER DATA:** None

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## SECTION XII

## OTHER REGULATORY INFORMATION

The components of this product are on the TSCA inventory of chemical substances.

Under Massachusetts Right-to-Know Law, hazardous substance and extra ordinarily hazardous substances components present in this product which require reporting are:

## EXTRAORDINARILY HAZARDOUS

SUBSTANCES CHEMICAL	CAS NO.	CONCENTRATION (=> 0.0001%)
ISOPROPANOL	67-63-0	100

Under the Pennsylvania Right-To-Know Law, hazardous substances and special hazardous substances components present in this product which require reporting are

HAZARDOUS CHEMICAL	CAS NO.	CONCENTRATION (=> 1%)
ISOPROPANOL	67-63-0	100

California SCAQMD Rule 443.1 VOC's

VOC: 785 G/L

VAPOR PRESSURE: 33 MMHG @20 Deg C.

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